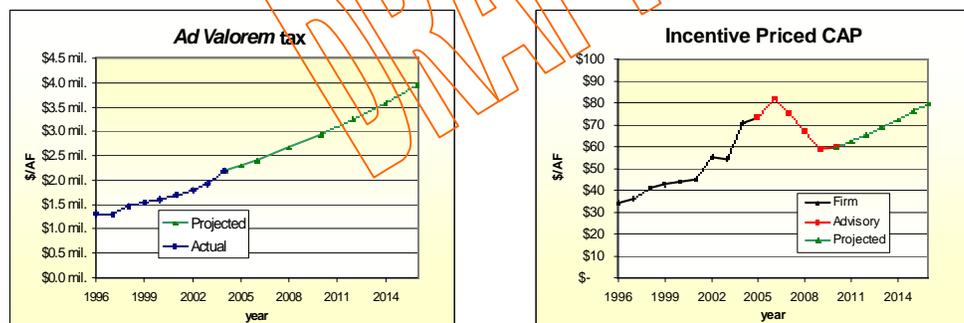


2005 Update to Recharge Analysis Tool and Tucson AMA 'Firming Gap'

In 2001 and 2002 the Tucson AMA Institutional and Policy Advisory Group (IPAG) developed an interactive tool to assist in the evaluation of regional recharge policy. The "Recharge Analysis Tool" combines financial and operational variables along with demand and storage projections, all within an integrated user interface. The tool was instrumental in quantifying the projected shortfall in storage necessary to firm M&I subcontracts in the Tucson AMA and in the development of consensus policy recommendations to the Tucson AMA GUAC and Arizona Water Banking Authority.¹

The Recharge Analysis Tool was recently updated, with a particular emphasis on factors affecting the Tucson AMA's M&I CAP "firming gap."



Changes

- Cost of water increased (rate & amount)
 - CAWCD's firm and advisory rates from 6/23/05 were incorporated
- Ad valorem taxes increased (rate & amount)
 - Data from Bruce Baseman, Pima County, and Gerry Wildeman, AWBA
- More projected USF capacity (SAVSRP)
- More projected GSF capacity (ASARCO)
- 17 kAF of General Fund storage was recharacterized to ad valorem
- The AWBA's firming target changed from 810 kAF to 864 kAF
 - Based on 2004 AWBA Annual Report

Results

- Firming gap remains; somewhat higher than 2002 projection
 - ~246 kAF vs. ~232 kAF
- Withdrawal Fees doesn't stretch quite as far (123 kAF vs. 151 kAF)
- A 100 kAF to 300 kAF gap remains over a wide range of plausible projections

¹ For further information, see: Seasholes, K. 2003. *Recharge Policy Analysis: Money, Facilities and Choices in the Tucson Active Management Area*. In *Proceedings of the 11th Biennial Symposium on Groundwater Recharge*. Phoenix, Arizona.